THE BEE,

OR

LITERARY WEEKLY INTELLIGENCER,

FOR

WEDNESDAY, MARCH 13. 1793.

ON THE POISON OF SERPENTS.

For the Bee.

No subject has engaged the attention of philosophers more than the poison of serpents, with regard to its nature, and method of operating. In this eſsay I will first treat of the weapons which the animals employ in communicating their poison; next with regard to the poison itself; and lastly, as to the method of cure.

Of the weapons which the animals employ in communicating their poison.

The ancient opinion was, that all the serpent race communicated their poison by means of a sting in their tail; and indeed some of the most early writers give figures of serpents with the sting in their tail; some have invented a similar fiction, that serpents stung by means of a forked tongue; while others, affecting superior discernment, have ascribed it to the teeth in general. These are all very erroneous opinions; for no serpent can poison either by the forked tongue or tail;

for there is no point in the one, nor sting in the other to poison other animals. In all poisonous serpents there is a small moveable bone adhering to each side of the upper jaw; in these, there are two or three tubular fangs, which resemble the canine teeth. The fangs can be laid flat and erected at the pleasure of the animal; and these fangs are the real stings of serpents, and the means by which they convey their poison. At the base of each fang is a small vesicle, which contains a little drop of a yellowish coloured liquor; this vesicle, at the bottom of the tooth, being compressed when the animal bites, the liquor passes through the tube in the tooth into the wound. These facts were first mentioned by Rhedi, and afterwards confirmed by Dr Tyson in his account of the rattlesnake given in the Philosophical Transactions. The North American Indians, after carefully extracting these venomous fangs, suffer the rattlesnake to bite them till the blood flows, with total impunity.

Of the hundred and thirty-two species of serpents that have been mentioned by Linnæus, there have been only twenty-three marked by him as possessed of poisonous fangs. Dr Walker observes, that the *amphisbæna fuliginosa*, a serpent well known in the Brazils, has no fangs; of course Linnæus has not marked it as poisonous, and yet its bite is well known by the Portuguese to be mortal; we must therefore conclude, (says he,) that there is no security to be found in serpents being destitute of moveable fangs; for in this instance, and I believe many others, they are capable of conveying a mortal

poison, though not poſſeſsed of these fangs or canine teeth, and of course their mouth is of different structure from other poisonous serpents.

Of the poison itself.

We must now turn our attention to the nature of the poison injected into the wound. This subject was first greatly elucidated by some experiments made by Rhedi, under the auspices of Ferdinand II. great duke of Tuscany. By these means a number of particulars were made known, which before were entirely unknown. The principal of these are the following:

When he either caused a living viper to bite a dog, or wounded him with the teeth of one newly dead, (the poisonous vesicle remaining unbroken,) the event was the same. If the bite was repeated, its effect became weaker, and at last was lost; the poison contained in the vesicle being totally exhausted. That the teeth of serpents when extended to bite, were moistened over with a certain liquor; and when the vesicle at the base was preſsed, a drop of poison flowed to the point of the fang. When the poison, thus flowing from the vesicle, was received first in soft bread or a sponge, an animal bitten by the serpent received no more harm from the wound than being pricked by a needle, till after a few days when the venom was restored a-freſh; but when an animal was wounded by the point of a needle dipped in the poison, it was tormented with the same pains as if it had been bitten by the viper itself. Preserving some of this poison in a glaſs, and totally evaporating the moisture in the sun, when the residuum was diluted with water, and the point of a needle dipped in the solution, Rhedi found, to his great surprise, that it had the same

my intentions in execution. I mention these times, because then will be the full of the moon, by which I am much regulated in my motions during winter; so that though I have no occasion for rhubarb, I may need a little hellebore.

"Writing on this commencement of another year, it would be unpardonable to forget the wishes of the season to Ascanius and his Aurelia; and that the *irrapta copula* may continue as long as they can enjoy human life, is the sincere wish of

On the Kalends of January, from my seat at Tobershine. FOLIACEUS."

SLIGHT SKETCH OF THE SEAT OF THE PRESENT WAR IN THE NETHERLANDS.

As the French may be expected to make their principal exertions during the present campaign, on the United Provinces, it will be agreeable to most of our readers to be made acquainted with the state and circumstances of them. With that view, a map is now preparing, and will be given as soon as it can be engraved. In the mean time the following slight notices of the southern parts of the United Provinces may prove acceptable.

Antwerp will probably be employed by Dumourier, as a place of arms during his operations in Holland. This city was for many centuries the capital of the whole Low Countries, while that was the most wealthy and the most powerful state in Europe. It was at that time the most opulent city in Europe, and the most noted emporium of the universe; its merchants were wealthy; its buildings magnificent; its manufactures flourishing; its trade unbounded. Lowes Guicciardin, who described it about the year 1425, and who had seen all the other most cele-

brated cities in Europe, speaks of the splendour of this city, in terms of the highest admiration. But after these dominions became an apanage of the king of Spain, the bigotted Philip II. by endeavouring to subject these free states to the jurisdiction of the Court of Inquisition, excited such a spirit of disaffection, as produced a revolt, which, after a war of thirty years, terminated in the dismemberment of that fine kingdom, seven of the seventeen provinces having established their independence, under the name of the *United Provinces*, by the treaty of Utrecht in 1581.

During the course of that long and ruinous war, no city suffered such a reverse of fortune as Antwerp. It was besieged, and at last taken and sacked by the duke of Alva. Its principal merchants retired then to Amsterdam, situated in the northern part of Holland, which is strongly secured against the attacks of enemies, by means of the marshes and shallow seas which surround it; and by the exertions of these industrious men, it has been raised to an exaltation that is in some small degree emulous of the state of what Antwerp had been. When Philip was at length constrained to grant independence to the United Provinces, Antwerp was the most northern town of note he retained; and the very men who had been driven from it, conscious of its natural advantages for trade, and afraid that it might become again their rival, and of the uses that might be made of it to their annoyance, took care to stipulate by treaty, that the Dutch alone should have the free navigation of the Scheldt, as the mouth of that celebrated river lies entirely within their territories; and during every change that has since taken place respecting those countries, they have maintained possession of it until the present time.

Antwerp is situated upon the N. E. side of the Scheldt, where the river takes a bend about sixty miles from the sea. It is a spacious place, but now much declined from its original splendour. The walls are reckoned no less than eight or nine miles in circumference; but within these are included many gardens. Its citadel has never been put into a thorough repair, since it was taken by the duke of Alva; so that it cannot be accounted at present a place of great strength; but on account of the river, which is here upwards of twenty feet deep, and 400 yards broad, flowing through a fertile country, no place could be better calculated for a store room than this, if the communication with the sea were open. It is twenty five miles north of Brussels, to which it has ready access by a navigable canal.

Breda is situated about thirty miles north and a little east of Antwerp. It is the first fortified town of any note on that side, in the territories of the United States. Busching thus describes it: "It lies upon the river Merk, which at this place receives the Aa. The latter of these streams, being a little before increased by the Byloos, is here rendered navigable, and thus gives it a communication with the German ocean. Its fortifications, without very great improvements, are unable to stand a seige; though the town itself is partly covered by a morass, and by means of the *Merk* and *Aa*, is able to lay a *part* of the country under water." It is about ten miles south of the arm of the sea through which the *Maese* falls into the ocean.

Williamstadt is a small fort about 16 miles W. of Breda, upon the point of the isle of Rugenhil; having a good harbour on the narrow sea called *Holland diep*, about fourteen miles from Rotterdam, on the opposite side of the same narrow sea.

Bergenopzoom is the strongest fortified town in this quarter. It is situated near the mouth of the Scheldt, about twenty miles S. W. from Breda, and about the same distance N. W. from Antwerp. Busching thus describes it.

"The south side of the town stands on a small eminence. It has long been celebrated as a strong fortress. Its wall, which is about an hour in circuit, is defended by five bastions, and ten horn works. Exclusive of the other fortifications on the north side, a strong line was drawn there in the year 1727, communicating with *Moermont*, *Pensen*, and *Rover* forts; and the *south*, or *water* fort, of five bastions, command the entrances of the old and new harbour. The adjacent country can also be laid under water; and as long as *Zeeland* continues clear of enemies, any supply, or reinforcements, can be thrown into it by means of the *Scheldt*. The States keep a good garrison here, and it is always commanded by a person of distinguished reputation. It was first walled in 1287. In 1588 and 1622, it held out against two powerful armies of Spaniards; but in 1747, after a seige of ten weeks, the French made themselves masters of it *by surprise*. In 1749, however, it was restored, though in a very ruinous condition."

All these places are situated to the south of the *Maese*, which may be said to be the natural bounding of the fortified Netherlands; as, to the north of that river, the country being very low, it is almost every where liable to be laid under water at pleasure. If the Dutch be serious in the defence of their country, they will, therefore, dispute the passage of that river, with all their power; and if they shall have provided themselves with a sufficient number of gun boats, it will probably be found a matter of great difficulty to force a passage on that quarter. To open

a way towards the eastern paſsage by Venloo, general Miranda will, therefore, no doubt puſh the seige of Maestricht as vigorously as poſsible. Of this part of the country, some slight notices ſhall be given in our next.

CONTINUATION OF THE CORRESPONDENCE OF DR ANDERSON OF MADRAS, RESPECTING THE BREAD FRUIT TREE, *&c.*

Continued from vol. xi. p. 297.

Letter from captain C. Dighton, to Dr James Anderson.

DEAR SIR, *Shevellapatore, March* 13. 1792.

I HAVE been favoured with your letter of the 6th instant, desiring information concerning the bread fruit tree.

It is not common about this place; but there are a few trees in a large garden called the Jumbo Tope.

The fruit is not much valued by the natives; however, they do make curries of it.

The tree large and extremely beautiful.

The leaf resembles, in some degree, the fig leaf.

The fruit has exactly the appearance of a small Jack.

By the people here it is called *Etapala-kay.*

It is propagated with much ease from the seed, and some trees are now thriving at the paymaster's garden at Palamcotta, from seeds I sent Mr Torin between two and three years ago.

Mr Torin transplanted some trees to the garden he now lives at, near Tinnevely; and as they are doing vastly well, I ſhould imagine it may be cultivated in almost any soil.

The fruit will be ripe the end of this month, or the beginning of next, and with your permiſsion, I will then forward some to you. I remain, *&c.*

Letter from Mr T. Bowser, to Dr James Anderson.

DEAR SIR, *Dindigul, March* 13. 1792.

I HAVE seen a specimen of the bread fruit tree, the same as that at Tritchinopoly; and having a promise of some young trees, in order to transplant, as also seed, I make no doubt by the information received from the country people, of bringing it to perfection at this place.

What was brought here, came from the valley of Dindigul, forty-eight miles off; and although I have been silent, I have not been inattentive; for I have now in my garden many thousand mulberry cuttings, in a most thriving condition, which have been taken from my own mulberry trees.

What I have done hitherto, has been for my own amusement, and managed by my gardener; however, should you think that I could give the smallest aid to your laudable plans, command me without ceremony. And believe me always yours, *&c.*

Letter from Dr James Anderson, to captain C. Dighton.

DEAR SIR, *Fort St George, March* 21. 1792.

I AM very much obliged by the distinct and full account of the bread fruit tree at Shevellapatore, and will be glad of some of the seed, as my trees are yet so young that there is fruit only on one of them.

You will see by the publication I have made, of which I have the pleasure to inclose you a copy, that government have promised to write to Sumatra, for two different kinds of this tree which are known there.

I have, in consequence of Mr Andrew's letter, taken the liberty to send you nopal plants, in the same manner as to our mulberry plantations, for which you will be so good

as to accept of the best apology I can make, that I am happy to place them out in such an able hand. I am, *&c.*

Letter from Mr George Powney, to Dr Berry at Madras.

DEAR SIR, *Cochin, March* 4. 1792.

EXCUSE me for not having replied to your letter of the 27th of January, before now, which requests information of the bread fruit tree;—my public avocations have prevented me from paying that attention to this object which I wished to do.

The bread fruit tree appears to thrive very well both at Cochin and Ayacotta. At the former place, there are several of them; but paid little attention to either by the Dutch, or the natives. Indeed there is a ridiculous prejudice prevails amongst the former, that the fruit is unwholesome, and that the tree, planted near a house, gives diseases to the inhabitants of it.

It is called the *Maldive jack*, both at this place and Ceylon, where I understand there are a great number of the trees.

From every information I have been able to obtain, I conceive it is indigenous to the Maldives, from whence it was brought to Ceylon about thirteen or fourteen years ago, and from that place to this.

I was told by a Dutch gentleman, that the bread fruit is very common at Batavia, and has been for many years past, used as food by the Malays.—I ate of it myself some time ago, and thought it resembled a yam; but of a very superior flavour.

There are no kernels or seeds in it; and it must be multiplied in the manner described by Dr Anderson, in his letter to Dr Mein, of the 29th of January 1792. Such is exactly the manner practised here; but it is not planted in the red volcanic earth mentioned by Dr An-

derson, but in common black mould; and this cannot be done for want of the former, as the soil here abounds with it. I have for Dr Anderson two very fine plants of it, one three feet high, a leaf of which I have now cut off, and send in this letter. I have likewise several cuttings from the root; they are all in boxes, and ready to be sent by the first opportunity. I have incrusted with wax, two of the fruit, which shall be sent at the same time.

I have received by three or four of the last tappals, some of the nopals, I take them to be? They are from Dr Anderson; but he has given me no instructions about them; and I was not so fortunate as to meet with his former publications which made mention of them. I have, however, planted them; my dubash knew them, and called them Ella Kalli.—The people here say that the Travancore country abounds with it.

Mr Martin has not yet sent me the silk worm eggs, and I imagine that his breed must have failed. Yours very faithfully, *&c.*

Letter from Dr James Anderson, to captain T. Bowser.

DEAR SIR, *Fort St George, March* 24. 1792.

I HAVE received your obliging favour of the 13th instant, and am very sensible of the value of its contents. As before this reaches you, your garden will be stocked with nopal plants, which, on the permission you have granted, I must request you will take the trouble to distribute slips from, to every village in your neighbourhood, abundance of which they will afford in the course of three or four months; and independent of their use in the expected cochineal business, these plants will prove a nourishing and wholesome vegetable to the natives of the country.

By a letter just received from Mr Powney at Cochin, it appears there are plenty of bread fruit trees there, and at Ayacotta, he is sending me two, which by all accounts are the Sookaon, as yours is the Calawee of Sumatra;—it is therefore likely we shall be able to procure enough of both kinds without crossing the seas.

Mr Powney can send you the sago, and many other valuable trees, which are mentioned in the Hortus Malabaricus, not known to exist at present on this side of the hills; and in case you have any vacant choultries, or spare houses, at Dindigul, I will send you some of the silk worm eggs, as they require good shelter against the monsoon, although the worms are spinning upon the trees in my garden at this season. I am, *&c.*

To be continued.

TO CORRESPONDENTS.

ANOTHER packet of the *Traveller* is received, and seems to improve. The continuation will be looked for at the time promised.

A second letter on popular writers is also received, containing Gibbon, Stewart and Gregory, for which the Editor returns thanks to the obliging communicator;—the remainder will be very acceptable.

The Editor is much obliged to *Yoric*, for his very ingenious observations on the book of Job. They deserve to be preserved; but they would not altogether suit; he fears the taste of a majority of his readers; for which reason he must reluctantly decline to insert them. They shall be carefully preserved in case the writer should call for them. Owing to misdirecting postage was charged. Nothing but *newspapers* pass at the Post Office under a similar address.

Thanks to *I. T. P.* for his very ingenious communication, the conclusion of which is requested before this can be inserted. The paper to which he alludes is not yet returned, but shall be called for soon. If he formerly gave his private address, it has escaped the Editor's recollection; and begs the favour when he next writes, he will have the good to mention it.

The Editor is much obliged to an old correspondent for the very ingenious hints on what he stiles the *Political Bible*, which though on a subject he wishes seldom to touch upon, is written in such a pleasing manner, and contains observations which he thinks so just, that he is persuaded, his readers will much approve of. These shall appear as soon as possible.

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Of the weapons which the animals employ in communicating their poison.

The ancient opinion was, that all the serpent race communicated their poison by means of a sting in their tail; and indeed some of the most early writers give figures of serpents with the sting in their tail; some have invented a similar fiction, that serpents stung by means of a forked tongue; while others, affecting superior discernment, have ascribed it to the teeth in general. These are all very erroneous opinions; for no serpent can poison either by the forked tongue or tail;

for there is no point in the one, nor sting in the other to poison other animals. In all poisonous serpents there is a small moveable bone adhering to each side of the upper jaw; in these, there are two or three tubular fangs, which resemble the canine teeth. The fangs can be laid flat and erected at the pleasure of the animal; and these fangs are the real stings of serpents, and the means by which they convey their poison. At the base of each fang is a small vesicle, which contains a little drop of a yellowish coloured liquor; this vesicle, at the bottom of the tooth, being compressed when the animal bites, the liquor passes through the tube in the tooth into the wound. These facts were first mentioned by Rhedi, and afterwards confirmed by Dr Tyson in his account of the rattlesnake given in the Philosophical Transactions. The North American Indians, after carefully extracting these venomous fangs, suffer the rattlesnake to bite them till the blood flows, with total impunity.

Of the hundred and thirty-two species of serpents that have been mentioned by Linnæus, there have been only twenty-three marked by him as possessed of poisonous fangs. Dr Walker observes, that the *amphisbœna fuliginosa*, a serpent well known in the Brazils, has no fangs; of course Linnæus has not marked it as poisonous, and yet its bite is well known by the Portuguese to be mortal; we must therefore conclude, (says he,) that there is no security to be found in serpents being destitute of moveable fangs; for in this instance, and I believe many others, they are capable of conveying a mortal

poison, though not poſseſsed of these fangs or canine teeth, and of course their mouth is of different structure from other poisonous serpents.

Of the poison itself.

We must now turn our attention to the nature of the poison injected into the wound. This subject was first greatly elucidated by some experiments made by Rhedi, under the auspices of Ferdinand II. great duke of Tuscany. By these means a number of particulars were made known, which before were entirely unknown. The principal of these are the following:

When he either caused a living viper to bite a dog, or wounded him with the teeth of one newly dead, (the poisonous vesicle remaining unbroken,) the event was the same. If the bite was repeated, its effect became weaker, and at last was lost; the poison contained in the vesicle being totally exhausted. That the teeth of serpents when extended to bite, were moistened over with a certain liquor; and when the vesicle at the base was preſsed, a drop of poison flowed to the point of the fang. When the poison, thus flowing from the vesicle, was received first in soft bread or a sponge, an animal bitten by the serpent received no more harm from the wound than being pricked by a needle, till after a few days when the venom was restored a-freſh; but when an animal was wounded by the point of a needle dipped in the poison, it was tormented with the same pains as if it had been bitten by the viper itself. Preserving some of this poison in a glaſs, and totally evaporating the moisture in the sun, when the residuum was diluted with water, and the point of a needle dipped in the solution, Rhedi found, to his great surprise, that it had the same

effect as when recent. But the boldnefs of one Tozzi, threw all the learned men of the age into the greatest aſtoniſhment;—he drank a quantity of this poiſon without ſuſtaining the leaſt injury. This ſeems to have been known to the ancients; for Lucan, in the ninth book of his Pharſalia, ſpeaking of the ſerpent, ſays,

> Noxia ſerpentum eſt admiſto ſanguinea peſtis
> Morſu virus habent, et fatum dente minantur,
> Pocula morte carent. PHARSAL. lib. IX. v. 614.

Many barbarous nations are perfectly acquainted with this property of the poiſon of ſerpents; for they dip their arrows in that poiſon, and when once introduced into human blood it is productive of the moſt terrible conſequences. But to return to our Florentines. That they might confirm this principle, they collected a quantity of poiſon, and gave it to different animals without producing the leaſt inconvenience; but when applied to an external wound, every one of thoſe horrid ſymptoms which accompany the real bite followed, *viz.* inflammatory and malignant fevers, ending in death, unleſs nature, by a ſpontaneous hemorrhage, or ſome other evacuation, diſcharged this poiſon. With reſpect to the experiments of Rhedi, every one of his obſervations prove, that the liquid preſſed out of the veſicle which moiſtens the fangs of the ſerpents, is only noxious by being conveyed into the blood, by means of a puncture or wound; and the caſe of Tozzi, who drank a conſiderable quantity of this poiſon without ſuffering injury, proves that it hurts the blood, only when externally mixed with it.

Symptoms of the bite.

The symptoms that attend the bite of the viper, are, a smarting in the part wounded; swelling, paleneſs, snapping of the eyes, tears; horror with coldneſs; a weak pulse, afterwards becoming unequal; thirst, cold sweat, pain in the reins; diarrhœa with griping and vomiting; difficulty of breathing, drowsineſs, and convulsions, which terminate in death.

Coluber prestor, a native of Sweden. Symptoms attending the bite of it, are pain in the wound, tumour, thirst, asthma, anxieties, convulsions, and death.

There is a serpent still more dreadful than any of the former, found in Sweden, called *coluber carcia*. The bite of this is followed by immediate change of colour, coldneſs, stupor, palpitation of the heart, acute pain all over the body, and death. Linnæus tried oil in this case, but it proved ineffectual.

The *coluber aspis* of Linnæus, is an animal commonly called the Egyptian asp, and well known to the ancients. The bite is followed by laſsitude, torpor, and death without pain. For these reasons, Cleopatra made use of this creature to put an end to her existence.

The *cratalus horridus* of Linnæus, the rattlesnake, kills in a very sudden manner; his bite usually producing death within twelve hours.

But the most horrid of all the serpent tribe, is what is called the *coluber naga*, of Linnæus. This is the serpent called in the East Indies *cobra de capello*. Its bite kills within an hour, with the most excruciating pains, and is attended with instant putrifaction,

and the flesh separates from the bones immediately. This is the serpent the ancients called *Sepe.*

Of the cure.

It would extend this paper to a prodigious length if I were to enumerate all the antidotes that have been employed against the bite of serpents. I shall confine myself to a few. About sixty years ago, an effectual remedy for the bite of a viper was discovered in England, by chafing the part with warm Florentine oil. The viper catchers are so confident of this remedy, that, for a small trifle, they will let a viper bite their hand. Linnæus found that the same antidote answered against the bite of the *coluber prestor.* In the case of the rattlesnake we have a very powerful antidote in the *polygala senega*, or rattlesnake root, for which we are indebted to the North American Indians. Proof was made of it in Sweden by Linnæus. A maid servant at Upsal, was bitten by a serpent upon a very dangerous place. The most dreadful symptoms followed the bite, and such as demanded the application of the most decisive remedies. Linnæus was sent to, and he sent two doses of the powder of this root, by which she was almost entirely recovered in two days. Besides these, there are other remedies used by the Americans, as the *veratrum luteum*, *aletris farinosa*, *uvularia perfoliata*, *sanicula Canadensis*, and others. The antidote against the *coluber naga*, or *cobra de capella*, is the *ophioriza mungos*, or Indian *ophiorriza*, a description of which may be seen in an elegant dissertation on that subject by Darelius, in the Amœnitates Academia.

P. H. N.

ADDITIONS ON THE ABOVE.

THE ingenious writer of this paper does not seem to be acquainted with a late discovery made in India, by Mr John Williams there, and publiſhed in the Asiatic Researches; *viz.* that the caustic volatile alkali, administrated in small doses, and repeated at ſhort intervals, proved effectual in all the cases in which it had been properly administered; even after the symptoms were the most alarming. The following case will serve as an illustration.

"In July 1784, the wife of a servant of mine, was bitten by a *cobra de capello* on the outside of the little toe of her right foot. In a few minutes ſhe became convulsed; particularly about the jaws and throat, with a continued gnaſhing of the teeth. She at first complained of a numbneſs extending from the wound upwards; but no ligature was applied to the limb. About sixty drops of the caustic volatile spirit were given to her in water, by forcing open her mouth, which was strongly convulsed; in about seven minutes the dose was repeated, when the convulsion left her; and in three more ſhe became sensible, and spoke to those who attended her. A few drops of the spirit had also been applied to the wound. The snake was killed and brought to me, which proved a *cobra de capello*."

Mr W. concludes his paper in these words: "I have seen instances of persons bitten by snakes, who have been so long without aſsistance, that when they had been brought to me, they have not been able to swallow, from convulsions of the throat and

sauces, which is, I observe, a constant symptom of the bite of the *cobra de capello*; and indeed I have had many persons brought to me who had been dead sometime; *but never knew an instance of the volatile caustic alkali failing in its effect, where the patient has been able to swallow it.*"

In the course of this dissertation he takes occasion to observe, that in one case, oil had been swallowed by the patient before his arrival; but that on administering the alkali, the patient vomited up the oil; which he considered as a fortunate circumstance; as he thinks oil tends to weaken the power of the alkali, which he believes acts entirely as a stimulant. *Eau de luce*, he says, may be successfully employed where the pure alkali cannot be had; but it is less efficacious. Fortunately for this country we have no dangers of this kind to guard against.

To the Editor of the Bee.

SIR, G. Dempster Esq.

IF you think as well as I do of the following extract of a letter I lately received from a gentleman of eminence in the country, you will not hesitate to give it a place in your useful Miscellany; by doing which I imagine you will oblige many of your readers, and give pleasure to

AN OLD CORRESPONDENT.

HINTS FOR A POLITICAL BIBLE.

I AM duly favoured with yours of the first instant. The plan of the Committee for disseminating useful

political knowledge among our lower classes of people, is most highly useful, and has my best wishes for its success. I like it because it is an institution quite the reverse of the Inquisition; and at least as well calculated for the support of a free government as the Inquisition is of a despotic one.

I wish some of your able pens would write a Political Bible, divided into short chapters, and adapted to our own constitution. It might begin by some preliminary observations on government in general, distinguishing the circumstances that constitute the essence of freedom and despotism; then give instructions to kings, princes, ministers, nobility, and gentry; and proceed to judges, and tax gatherers, not forgetting the clergy; and then, descending to the lower classes, a few well stated facts might be thrown in, to persuade them, though the lower, they are not therefore the less happy orders of the state. They begin already round me to feel they are the most useful. When a poor man told a rich one that he was very hungry, the rich man exclaimed, "How happy you are! I have not had the pleasure of being hungry these twenty years." Did they but reflect how invariably our Maker has attached bodily health, and peace of mind, to industrious occupations, they would view us idlers with less envy. Then show them how our excellent constitution secures to them these happy fruits of their own labour; and that the general protection of good laws, extended to us landed proprietors, extends their means of being employed,—that is of being happy. I should expect to see the people attached warmly to our constitu-

tion in proportion to their poverty, and not, as is now the case, in proportion to their wealth. For I am convinced the discontent and uneasineſs, which, I am sorry to say, I find pretty prevalent among the lower claſses, all proceed from ignorance, worked upon by misrepresentation.

Our Political Bible, like our Sacred Bible, might consist partly of precepts, and partly of history. A ſhort historical account of the progreſs of liberty, and of the succeſsive improvements on our constitution, would have a great effcet. Its present state, I would boldly aſsert, to be so near to perfection, that it ought only to be touched in future by the most ſkilful hand, and very gently. A contrast of the condition of the labourer in Spain, Italy, Turkey, and of the tradesman there, might be introduced. At present, the people round me are all getting rich; getting better houses, clothes, and food, by means of rights which they do not know they enjoy. This want of instruction your Commitee is meant to supply. Judge then of the beneficial effects it may produce. I am particularly anxious to see William Playfair's book on the consequences of a parliamentary reform; because that is the most popular, and yet the most dangerous crotchet the people have got in their heads. What they aim at for the boroughs, would only extend drunkenneſs, ſdleneſs, and corruption. Our boroughs would be better if deacons of crafts were chosen for life, like the aldermen in London. The public accounts indeed ſhould be very open to inspection, and subject to easy controul. But to return from this digreſsion. As a slight ſketch, to

convey something like an idea of what I mean, take the following as an example.

SPECIMEN OF THE POLITICAL BIBLE.

Book first, Chapter first.

1. A king not controuled by his nobles and people, is a despot; as witneſs Morocco.

2. Nobles not controuled by a king and people, are despots; as witneſs Venice.

3. A people not controuled by nobles and a king, are despots; as witneſs France.

4. A state in which king, nobles, and people, have each a ſhare in the government, is free; as witneſs Great Britain and Ireland.

5. The different ranks of life, like the different seasons of the year, have each their use. God made them both.

6. The hottest season is not always the healthiest; no more is the richest man always the happiest.

7. The winter prepares the ground for ploughing in the spring; the spring prepares it for bearing corn in summer; the summer ripens the corn for reaping in autumn.

8. The rich man gives his money to reward the industrious poor man; the poor man gives his industry to minister to the wants of the rich. Could they do without the aſsistance of each other? God made them both.

9. Despotic governments are worse for the poor man than for the rich one; as the poor man is sooner ruined than a rich one.

And so on to the end of the chapter.

If you can find a man of abilities who is above the influence of party, and free from prejudice, it might be made a valuable treatise indeed. Should that be once done, and were it revised by men of cool heads and sound judgement, so as to receive their approbation, I would, in that case, give the king's printer a little allowance to add one of them to every copy of the Bible, New Testament, and Prayer Book, under the title of the Political Bible of a free born Briton. The children ſhould learn the use of king, lords, and commons, by heart; then a chapter of the king's duty; the duty of the noblility; the duty of the people; then of law, how it preserves life, character, property, and so on. But I have said enough to give you an idea of what I mean, and that is all I intend at present *.

THOUGHTS SUGGESTED BY THE ABOVE.

The Editor would not presume to disfigure the above performance by any additions or interpolations of his own; but he could not resist the temptation of subjoining a few thoughts that the perusal of the above suggested to his mind;—not as a continuation of the chapter, though the verses are so numbered; but as an amplification of it in some degree, which he hopes will not be deemed misplaced at the present time; but which, being

* No person can be so well qualified to execute this taſk as the ingenious proposer himself; and if he will go on to complete it on the model here so happily begun, he will confer an important service on the commuhity; and if he will favour the Editor with a chapter from time to time, as Mahomet did of the Koran, it ſhall be regularly inserted in the Bee, till the whole be completed; after which it might be transplanted into the place allotted for it by him, if judged expedient. *Edit.*

carefully distinguiſhed from the text, may be omitted when the work is completed.

10. That government only is free, in which laws that have been deliberately enacted, are ſo inforced, as that no individual in the ſtate can injure the perſon, or attach the property of another, with impunity.

11. Freedom may be impaired by deſpotiſm on the one hand, or anarchy on the other; but every germ of freedom is totally annihilated where both deſpotiſm and anarchy prevail at the ſame time.

12. A deſpotic government is that in which any ſingle undivided power is enabled to make, and to repeal laws, at pleaſure, and to cauſe them be inforced in the way it chooſes to dictate.

13. Deſpotic authority may be veſted either in one perſon, as in Turkey, Ruſsia, and ſome other kingdoms; or in an aſsembly conſiſting of many perſons, as in France at the preſent moment.

14. Anarchy prevails wherever the authority of government is ſo feeble as that other powers ariſe within the ſtate which overawe it, and prevent the execution of the laws; or where ſeveral powers contend for predominance, ſo as to render the peaceable ſubject unable to determine clearly what he ſhould do.

15. When deſpotic authority is veſted in one ſingle perſon, the orders of that perſon will be prompt; and the execution of theſe orders ſo vigorous, as to make them be inforced without ſtruggle or diſpute. And although neither induſtry can be here vigorously exerted, nor wealth be accumulated to a high degree, nor the mental faculties of man be carried to perfection; yet if human beings are content to enjoy domeſtic tranquillity, without aſpiring at affluence or diſtinction, they may be there of-

ten suffered to vegetate at least, in quiet. In this situation *pure despotism* prevails.

16. But where the despotic authority is vested in many, no man can enjoy even this kind of quiet. The will of no individual of that body constitutes the executive power; so that transgreſsions of the despotic will cannot be puniſhed with promptitude;—what was decreed to-day, by the prevalence of one party, may be annulled to-morrow by the prevalence of another. The decrees are thus not only more variable than they could be under any one man, but they are often altogether contradictory. From the general ignorance that must for ever in that state prevail, as to the knowledge of the decrees in force, the persons employed to inforce the law thus become a set of petty despots, who, from the unsteadineſs of those above them, must be perpetually tempted to engage in acts of plunder and oppreſsion: and as these petty despots must be at times discovered and puniſhed by a party which is inimical to their friends, acquiring power for the day, the people will be always on the catch to dispute their authority; a constant succeſsion of struggles for power must be the consequence through all the land; and the strongest for the time must ever predominate over the others; so that peace or quiet are altogether unattainable in any station of life. In this situation despotism and anarchy equally prevail, and freedom is entirely annihilated. This may be called *anarchical despotism.*

17. Of all the kinds of government that can be conceived, that of anarchical despotism must not only be the most unstable and oppreſsive, but also the least economical. In a pure despotism, the rapacity of one despot may be satiated; and there is at least a chance that generosity of sentiment may sometimes animate his bosom. But in a state of anarchical despotism, the rapacity of the

many must be insatiable; and by throwing the load from each individual on the whole body, even ſhame is annihilated; and if these despots are to enjoy power but for a ſhort time, their appetite for plunder will be whetted by the consideration that they ought to lose no time in acquiring it. From the dread of detection, each will be disposed to wave severe scrutinising. This will produce a general and tacit connivance at the enormities of each; ſo that all attempts at inquiry will be quaſhed by a vote of the majority, and the most ſhameful peculations must thus escape with impunity. Could it have been poſsible, under any other form of government, to have screened the robbers of the *Garde Meuble* in France from detection?

18. To insure freedom to a people, and to guard against despotism, it is neceſsary that no *single* undivided power whatever ſhould be intruſted with the sole privilege of enacting laws; but that the concurrence of several distinct powers, which may have different views and inclinations, ſhould be required, before any law can be binding on the nation: and the executive power ought ever to be separated from the deliberative voice.

19. To guard against anarchy, on the other hand, the arm that is intrusted with the execution of the law, ought to be strong and irresistible, so as to be able, without danger of succeſsful resistance, to seize and bring to due puniſhment, by a clear and direct trial, every person, whoever he be, who ſhall dare to infringe the laws.

20. Whatever tends to weaken the executive arm, tends to remove the only ſhield that ever can be interposed to protect the weak, against the oppreſsive grasp of the powerful.

21. To prevent the laws from being oppreſsive, they ought to be enacted with a proper regard to the circumſtances of the people; and care be taken, that no law can be

enacted, but with due deliberation in several sittings of each department of the legislative council, that time may be given for reflection, and opportunities afforded, before passing the law, for parties who may think they will be aggrieved by any proposed law, to state their objections to it before the legislative council, thus to prevent these legislators from being betrayed into the enacting iniquitous laws through ignorance.

22. When a law is once enacted, provision should be made against a possibility of repealing it on a sudden; that thus the many evils which must ever originate from a great mutation, and consequently a general ignorance of the existing laws, may be avoided.

23. The *legislative* department of government, should in no case have any share in the *executive* power; because this tends directly to establish an uncontrouled despotic authority: but it ought to possess a power of calling the tools of the executive power to account, wherever they had exceeded the powers intrusted to them by law; and of punishing them without appeal, where they should be fairly convicted of a crime.

24. The *judicial* power should be totally different from, and independent of both the *executive* and *legislative* departments of government, unless where the judges shall be convicted of having exceeded the powers intrusted to them by the law; that thus the persons who made the laws, may not have it in their power to stretch them, on particular occasions, beyond the limits for which they had been originally intended; and thus, by their preeminent power, be enabled to evade punishment when acting unjustly. It was by thus stretching the law at their pleasure, that the unfortunate Louis was condemned by the mere will of a junto, without a shadow of law.

25. It is upon these rational principles that the goodly fabric of the Britiſh constitution, has, by slow degrees, been reared up, and upon this sure basis the freedom and prosperity of this country has been founded. The Commons and the Peers must each of them deliberate separately, during the course of *five* sittings at least, including the moving for, and obtaining leave to bring in the bill before it can be paſsed. Parties may be heard at the bar against it, during its progreſs through both the Houses, in all its stages. When it has even paſsed both Houses, it must also be sanctioned by the Royal authority, before it can obtain the force of a law. Besides all these precautions, it is also neceſsary, in regard to bills that tend to infringe upon private property, that public intimation be given of an intention to bring in such a bill, *six months* at least before it can be proposed in either House. Thus carefully are the rights of individuals guarded against infringement by surprise, in Britain; and thus attentive have we been to prevent improper laws being enacted, through blind prejudice or casual ignorance in the legislators.

26. And when a law has once been duly sanctioned by the *legislature*, the execution of it is then taken out of the hands of the legislative power, and entrusted to the king, who is armed with ample powers to compel ready obedience to these decrees, after it ſhall have been ascertained by the verdict of a jury of honest men, that any of them have been transgreſsed; and after the judges, who are endowed with ample salaries, and who are alike independent of the parties accused, and of those who are the accusers, ſhall have awarded the sentence that the law authorises. Nor is there any order of men in the state which is not under the controul of the law. The king, himself, though his person be inviolable, is, through the medium

of his servants, without whose concurrence he can do nothing, equally under its controul as every other person, in as far as respects the ordinary transactions of life; and in regard to higher crimes, the most favoured servant of the crown may be tried by IMPEACHMENT; and if by the judges he ſhall be declared guilty, he muſt inevitably be puniſhed, without a poſsibility of his being screened from it by the royal protection. Such are the means, that, from the experience of ages, have been adopted by the Britiſh conſtitution, to guard against those two powerful enemies to freedom, ANARCHY and DESPOTISM.

27. In France all these checks against despotism and anarchy have been totally neglected; and the most perfect system of anarchical despotism that can be conceived, has been there concocted, and carried to a height of perfection it never had attained in any other part of the earth. A decree may be paſsed in the National Convention as soon as it is proposed; and the moment it is paſsed it has the force of a law. This decree may be proposed by any man who pleases to do so. The decree may be again reversed during the same sitting, if it ſhould so please the Convention. In these circumstances it is impoſsible for any man to know what is the law; or to have a reasonable aſsurance that he can either be justified in resisting what is required of him, or be puniſhed legally for resistance.

28. The Convention has not only the power of enacting laws at pleasure, but of executing them in the way it pleases. The armies, the navies, the ministers, the judges, are all amenable to its bar. And if it wiſhes to protect the guilty, or to puniſh the innocent, there is no legal power whatever that can oppose it.

29. But there is a power which does check this aſsembly. There is a power which dictates to it. There is

a power which moulds its decrees at pleasure; and though unseen, over-rules every thing. This power is not the People,—this power is not the Federates,—this power is not the Jacobin Club. It is the Ruler of the leaders of all these separate bodies, which acts with sovereign uncontroulable sway, without being brought into view. Like the eastern despots of old, who issued their mandates from the innermost recesses of the palace, this invisible power, by its inarticulated volition only, has already immolated thousands on the altar of despotism. It was this invisible power which assembled the Marsellois; it was the same power which planned and effected the massacres on the 10th of August, and the 2d of September; it was this power which brought the artillery from the ramparts of St Dennis; it was this power which drew the Federates a second time from Marseilles to Paris; it was this power which guarded Louis to the block; and it was this power which sent the Federists back again when the deed was done.

30. Under such a system of despotism, what security has any man for life, for property, for any thing? Innocence is no guard; industry can afford him no resource; the law can give him no protection. His only safety consists in a mean submission to the will, or a base concurrence with the measures of the despot; and even this affords him only the precarious surety of the moment. To assert that a nation enjoys freedom under such circumstances, is the same thing as to maintain, that after a house is already in flames, if it be left to itself, it will not be consumed!

Disquisitions concerning the Mode of making Bricks among the Romans.

It is acknowledged, that the ancient Romans poſſeſsed the art of making bricks in much greater perfection than any of the modern nations of Europe. Many buildings that have been erected with these ancient bricks, have withstood the viciſsitudes of weather for some thousands of years, and yet remain firm and entire; whereas modern works, consisting of these materials, begin to moulder away almost as soon as formed, and are unable to resist, but for a very ſhort time, the slightest viciſsitudes of weather. This difference can only proceed from our ignorance of the manner of manufacturing bricks; as we are still poſsesſed of the same materials that they employed: it is therefore an object well deserving our attention, to try if we can discover wherein our error consists, that we may be enabled to regain this long lost useful art.

Clay, in its native state, is capable of being softened by water, and of being in some measure diffused therein, so as to form with it a cohesive ductile paste, that admits of being moulded with ease into a great variety of forms; which forms it may be made to retain after the water has been evaporated from it. But if clay has been exposed for a sufficient length of time to the action of an intense fire, it loses all these properties; it acquires a hard and stony consistence; is no longer capable

of being softened, or in any manner acted upon by water; if that is reduced to powder, it is incapable of any adhesion when mixed with water, but remains an incoherent mafs in every respect resembling fine sand.

Hence, then, it follows, that if a mafs of native clay be well soaked in water, and thoroughly kneaded with it into a fine paste, and then moulded into a proper form, and baked in a kiln, it will be converted into a hard stony mafs, retaining the form it was moulded into. This is in fhort the procefs followed in the manufacture of bricks. But there are some peculiarities that occur in the procefs which require to be explained, before we can hope to discover in what manner our manufacture of this article may be improved.

When clay is reduced to a paste with water, it occupies a much larger space, than when it is perfectly dry; and by consequence, if it is moulded into any form when in this soft state, the mafs will gradually fhrink in all its dimensions, as the water is evaporated from it in drying. Hence, it happens, that if the mafs be of any considerable size, the parts are apt to separate from one another in drying, so as to make it appear full of rents in every part, which in many cases renders it unfit for the purposes intended.

To prevent this defect it has been found neceffary in all cases to mix with the clay some extraneous matter which does not absorb water, or swell with it in any considerable degree, which being envelopped in the soft clay, is rendered coherent by

that means; and in proportion to the bulk of that extraneous matter, the contracting in drying will become the leſs considerable; so that by mixing it in considerable quantities, the cracking in drying will be entirely prevented.

The matters that have been employed for this purpose have been different in different countries, and varied according to the uses that the manufactures were intended to answer; some being more proper for one use, and others for another.

In warm countries that enjoyed a serene climate, it has been found, that bricks baked in the sun, attained a degree of hardneſs sufficient for ordinary uses; and on these occasions, no material has been found more proper for the purpose than straw chopped small: for this substance not only served to diminiſh the contraction in drying, as above explained, but also to cement the different parts of the brick together, and to give them a greater degree of cohesiveneſs than they would naturally have had. It is precisely for the same purposes that we, in modern times, find it neceſsary to mix hair with plaster made of pure lime, which would be apt to crack and fall down were it not for this addition. Of this kind were the bricks made in Egypt by the Israelites of old, who had good reason to complain of the hardſhip of being obliged to make *bricks without straw.* A composition of the same kind is still used for making walls to low huts in some parts of England, and in the north of Scotland; but as the sun would not there be sufficient to dry bricks in the manner of those used in Egypt, the builders

content themselves with laying succeſsive layers of the paste, while yet soft, above one another in the wall, and there moulding it into the proper form, and allowing it to harden till it be sufficiently firm to carry another layer. It is then covered with a roof, that prevents water from soaking into it; and although some of the clay is waſhed off whenever the wind is so strong as to beat the rain violently against the wall, yet with proper care to keep the roof tight, some of these walls will stand a very long time. This is perhaps the rudest and most imperfect kind of bricks.

But as clay never loses its quality of becoming soft with water, till it has been subjected to a very intense degree of heat, it becomes neceſsary to mix it with some substance that is capable of resisting that degree of heat, without being consumed, if we hope to have such bricks as ſhall be capable of resisting the weather for any length of time uncovered.

The substance universally employed in modern times for mixing with clay in the manufacture of bricks intended to be burnt in a furnace is sand; and although this is, on many accounts, an improper substance to be employed for that purpose, it seems hardly to have ever entered into the head of any manufacturer of bricks, that its place could be supplied by any other substance whatever *. This I imagine is the real cause of the badneſs of modern

* In the neighbourhood of London, coal aſhes, usually called *duſt*, have been for some time past succeſsfully employed for that purpose; but these bricks also contain a large proportion of sand.

bricks, as will, I hope, appear to be the case from the following considerations.

Sand, by itself, requires a very intense heat to bring it to fusion; but when mixed with any other earthy substance, it not only becomes itself easily fusible, but endows the whole mass with the same quality; so that no earthy mass, in which sand abounds, can resist an intense fire without being vitrified. Hence it necessarily follows, that if bricks, in which it abounds, are subjected to an intense degree of heat, the whole mass would be melted, and the bricks would lose their shape. To prevent this inconvenience, therefore, it becomes necessary to expose these bricks to a degree of heat in baking, that shall not be so intense as to vitrify the mass. But this moderate degree of heat is not sufficient to deprive the clay entirely of its quality of absorbing, and of being softened by water; so that these bricks, when exposed to the weather, absorb some part of the water that falls upon them, which in time softens the clay, and makes it crumble to dust.

Thus it appears that it is in vain to hope for good and durable bricks of any kind, so long as we continue to employ clay, for that purpose, that is mixed with sand in almost any proportion. Hence I would asume the following *postulatum*.

Good bricks can only be formed of a clay that is naturally pure; or at least that is unmixed with sand of any sort.

It is as vain, however, to expect that good bricks can be made of pure unmixed clay, in its native

state, as that it could be made of the same clay mixed with sand; some addition is always neceſsary to prevent it from cracking in drying or burning. We muſt therefore find a ſubſtance to be added to clay, which is not only itſelf refractory in the fire, but which alſo allows the clay to be equally refractory after being mixed with it, as it was by itſelf.

And ſuch a ſubſtance, without attending to others that come at too high a price for ordinary uſe, we meet with in the clay itſelf. We have already ſeen that if pure clay is burnt in an intenſe fire, it loſes all its former qualities, while it acquires thoſe that are wanted on the preſent occaſion. It becomes in that ſtate equally inſoluble in water as ſand; equally capable of reſiſting the fire as any other ſubſtance; and is capable of being reduced to a very fine powder, which may be mixed with the paſte of native clay in almoſt any proportion, without deſtroying its ductility. To form bricks therefore that ſhall be equally hard, and equally capable of reſiſting every variation of the atmoſphere with the fineſt native ſtone, all that ſeems to be neceſsary, is to make choice of a clay that is naturally free of ſand or metallic ſubſtances in any conſiderable proportion; to bake ſome part of that clay without any mixture, till it is reduced to a ſtony conſiſtence; to pound that baken clay till it ſhall be reduced to a fine powder, and afterwards mix that powder with the paſte of native clay, in due proportion to prevent it from cracking, before it is moulded into the proper form. This paſte

will then admit of such an intense degree of heat, without being fused, as will reduce all the clay in its composition to the state of a stone, on which water will never make the smallest impreſsion, while at the same time it will retain its original form unimpaired.

This substance will no doubt come at a somewhat higher price than common bricks; because it will require at least double the quantity of fuel to burn it; but this, with the pounding the burnt clay, (which in large works, and for ordinary purposes, could be done at a very small expence,) are the only additions to the charge at present. This might make them come perhaps at nearly double the price (exclusive of carriage) which they cost at present. But as the price of carriage would be the same as now, this small original advance of price would be inconsiderable, considering that one brick so formed, would stand at least ten times as long in an outer wall, as the ordinary bricks at present in common use.

A composition of this kind has been long succeſsfully employed as a luting for chemical veſsels, which affords a sufficient proof that it would answer the purpose required above very effectually.

To be continued.

DETACHED REMARK.

To see the world, and to know the just value that ought to be set on human favour, is only to be learnt in the school of *adversity;* a leſson which is taught in no other *academy* upon earth.

THE PLAID, OR JUPITER'S REPLY TO SCOTIA'S REQUEST.

For the Bee.

Thus spake great Jove, when he survey'd our isle;
"Let England's plains with gold in plenty smile;
Rich be her sons,—her daughters kind, and fair,
Free as their *thoughts*, these *unconfin'd* as air!
Here will I plant my ever sacred tree *,
Firm as the hearts of men, who know they're free;
Sacred to mystic rites, its shade shall spread
A leafy cov'ring o'er the druid's head;
Or scudding o'er the deep, shall commerce guide;
Or by her Thunder, humble France's pride:
Her thunder, which the cruel foe shall fear.—
Yet for a breastplate, she shall mercy wear!
The naked Indian, while he homage pays,
Shall with his tribute, bring the song of praise;
Her kindness shall inflame his heart so rude;
They conquer twice, who conquer to do good."
A lovely female, clad in mean attire,
Low on the earth, bespake the mighty Sire;
'Father of men! whose love enslaves the mind,
Thou know'st the weakness of all human kind;
A mother for her sons, that love would crave.—
Bleak are our hills, Oh! make my children brave!
Shield them, but, Ah! beneath my Maker's eye,
Poor Scotia feels that all who live must die.
A mother's heart lies open,—thou can'st tell
What passes there, for thou dost know it well.'
His hand he wav'd; ten thousand colours shed
A radiant lustre round the Thund'rer's head.
'Woman! thy pray'r is heard, thy thoughts are known,
And by that signal, I thy children own.
Assume this garb, with varied shades adorn'd,
(For fancy *play'd*, when she the rainbow form'd;)
My signal shewn, the heav'ns dissolve in tears,
Thy signal given, shall wake unheard-of fears;
And Scotia, midst the dying on the plain,
Shall weep the foreign heroes she has slain.
Thy virgins, lovely, too, shall help mates prove,
And wake in good or ill, the soul to love.
As clings the ivy round the stately tree,
Thus constant shall the Scottish females be;
A husband must admire the gen'rous bride,
Who weds his virtues, and his faults would hide.
I give a boon, which neither place, nor time,
Nor Afric's heat nor Zembla's frozen clime,

* Oak.

Shall e'er wrest from your sons. Their hearts shall feel,
(True as their maidens, polish'd as their steel,)
A gen'rous passion,—something *more than name*,
A Scotsman's friendship is a noble flame:
Tho' for each other's woe their hearts shall melt,
Too *proud* to think that for themselves they felt.
Then far in Fate's dark womb to human ken,
Though as to-morrow, to the God of men,
He hail'd the day, when under [illegible]s sway,
These firm united, long should both one law obey."

Q. D. C.

A SONG.

When clouds that angel face deform,
Anxious I view the growing storm;
When angry lightnings arm thine eye,
And tell the gath'ring tempest's nigh,
I curse the sex, and bid adieu
To female friendship, love, and you.

But when soft passions rule your breast,
And each kind look some Love has drest;
When cloudless smiles around you play,
And give the world a holiday,
I blest the hour when first I knew
Dear female friendship, love, and you.

GLEANINGS OF ANCIENT POETRY.

TO THE SPRING, BY DRUMMOND OF HAWTHORNDEN.

Sweet spring, thou turn'st with all thy goodlie traine,
Thy head with flames, thy mantle bright with flow'rs;
The zephyres curle the greene lockes of the plaine,
The cloudes for joy in pearles weepe down their show'rs.
Thou turn'st, (sweet youth!) but Ah my pleasant howres,
And happie dayes, with thee come not againe;
The sad memorialls only of my paine
Doe with thee turne, which turne my sweets in sow'rs.
Thou art the same, which still thou was before,
Delicious, wanton, amiable, faire,
But thee, whose breath embaulmed thy wholesome aire,
In gone't nor gold, nor gemmes her can restore.
Neglected vertue, seasons goe and come,
While thine forgot lie closed in a tombe.

Northern Fisherman, a Tale.

For the Bee.

"Wouldst thou, my prince, inform thyself of the situation of thy people, that thou mayest redress their grievances, and promote their welfare, consult not the wealthy merchants of Damascus, nor the proud lords of landed inheritance; but turn thine eyes into the shop of the humble mechanic, the cottage of the industrious peasant, and the village of the laborious fisherman.

Contes Arabes.

William was a young fisherman, in a small sea port town on the frith of Forth in Scotland;—he had been brought up from his infancy by his industrious parents, in the constant exercise of his laborious profession; and, while a boy, if any intermission took place in the fishing through the rigour of the season, the opportunity was embraced by the anxious old man, in sending William to school, that he might be instructed in the useful sciences of writing and arithmetic, and in the duties of Christianity. When William grew up, his personal accomplishments surpassed those of almost all the young men in the village. He was handsome and robust, and possessed a vigorous understanding; he was always foremost in every interprize wherein the exertions of strength and activity were called forth in the prosecution of the fishery. When a ship should happen to be in distress in the neighbourhood, on which occasions the honest fishers were always wont to risk their lives, and their little property, in the relief of the unfortunate crew, William was usually the first in launching out his little boat, and prompting his fellow watermen to venture upon the waves, and carry the necessary assistance to the worn out sailors. Thus was he beloved by all the inhabitants of the village,

and by his well directed industry relieved his old parents from a great part of the toils by which they had gained their livelihood, and educated this promising youth.

Whilst William was living in this happy and contentful situation, he married, at the age of twenty-two, Betsy, a young villager, who had been his intimate friend from her infancy, and who shone no less than him in her beauty of person, and excellence of character. They loved each other passionately, and knew each other so well before their union, that that circumstance made no change on their affections, but rendered their happiness still more complete than before.

The young couple had been blessed in the possession of each other four months, when one day William was engaged to pilot a ship down to the island of May. The day was fine, and the wind was fair. Betsy had, with her usual attention, a refreshing supper prepared for her husband, whom she expected to arrive in the evening, fatigued with the labours of the day; and to be as usual cheered with her kindness, and her simple song. She went at eight to the green on the shore of the sea; and whilst she sat knitting a stocking, fatigued her eyes with incessant gazing towards the eastward. Every speck she saw on the distant waters, she fondly imagined to be the little sail of William's boat; she anxiously watched every ship that cast anchor in the road, in expectation of seeing the slender bark launched from it, and row towards her. Thus did Betsy sit, musing, and watching till the sun had almost withdrawn his kindly rays.—Her uneasiness began to be inexpressible. She arose, and went home, hoping that her wished-for mate might have come over-land, and be waiting for her in her little cabin; but in vain; there was no William there. In sad uneasiness she spent the few hours of a summer night, now thinking of one thing

that might have retarded his return, now of another; hoping for the best, and fearing for the worst; when at the early dawn, ſhe was terrified by the hoarse bawlings of sailors, the flaſhing of oars in the smooth harbour, and most terrible of all, the screamings of her female acquaintance. She started from her lonely chair, (for in bed ſhe had not been,) ran to the street, and there the first object that met her anxious eyes, was Jack, her huſband's most intimate friend, dragged along by two armed ruffians. "Almighty heaven! (exclaimed ſhe,) what are you doing? What has Jack been guilty of? where do you drag him?" —'To serve the king, and be damned to you!' was the sullen answer; and the forlorn Betsy saw, while the unavailing tears burst heavily from her eyes, her huſband's partner bound, beat, thrown into the boat, and borne away. Sadly then did Betsy sigh, sadly did ſhe weep, and bitterly did ſhe lament the cruel fate that tore her William from her, and threw him into bondage; but unavailing were her sighs, and unheard were her complaints, and those of many a widowed wife, helpleſs child, and comfortleſs parent in that thriving village. The prime of the place, the noble youths were all borne away,—perhaps never to return.

A sad reverse of fortune, now rent the heart of poor Betsy. The little money ſhe had, could but for a ſhort time support her gray haired father-in-law, and herself; and the means of her former fruitful industry were now taken away, when the aid of her dear William was no more; but he and ſhe were so much loved by many people in the neighbouring city, that ſhe received aſsistance from them; and her misery was not so great as that of many of the other village wives, who had no such resource. But nothing could console her for the loſs of William; and often, for some days, with forced

hopes, would she exult at the possibility of his having escaped the iron hand of the impress, and make his appearance in disguise; but days and weeks passed away, and William appeared not. At length the following letter, brought, though a mournful comfort, a relief to her anxious suspence.

My dearest Bess, *Portsmouth, 20th of June.*

You know I went on board the Trader, to pilot her down to the May. When I was coming up with Tom Russel and Bob Hughs in the boat with me, we were all pressed, and so brought here in the Champion frigate. As I seed I could not get off, so I bethought myself that it was for the best to enter; but they are talking of there being no war; so hopes we will soon be paid off again. In the mean time, I am in good health, and would be in good spirits, if it were not for thinking of you my dear. So my dear you will write to me, to the care of captain Gun, of the Thunder frigate, with which I am entered; and you will do it soon, lest we should be gone from here. So remain my dear yours until death.

William Smith.

Betsy then began to be resigned to her fate, and was daily in hopes of the impress ceasing, and the sailors being discharged. Thus passed six months, at the end of which she was delivered of a fine male child. Soon after her recovery, she heard the agreeable news of the preparations for war being at an end; and received a letter from Willam, that he was paid off at Portsmouth, and had taken his passage in a ship round to the Thames, from whence he was to come down to Leith in one of the London traders. Betsy was now quite overjoyed; her good spirits made her take still greater delight in caressing her little infant, in whose face she already perceived its father's likeness; and she rejoiced in anticipating

the pleasure of presenting the sweet innocent to him on his happy return.

She was already become uneasy at his not arriving, or her not having again heard from him, when she received the following letter:

DEAR BESS, *Gravesend, 1st of Feb.*

When I arrived in the river, and was a going aboard a ship, to see if so be that I could get a passage to Leith, there was a spar fell off the deck, and struck me on the shoulder, and knocked me down, and the end crushed my right hand on the boat's gunnell. Seeing that it was so that I was too much hurt to go to sea, I came back here and have since been a little feverish. As I cannot write with my hand, this is not wrote by myself. I would not have you be uneasy my dear, because I hopes to be soon well and able to come to you. Till then I am your loving husband WILLIAM SMITH.

This, again, threw Betsy into sadness and distress; her anxiety magnified every thing in the letter; she imagined William to be dangerously ill; and, in short, immediately formed the design of going to him herself. All her friends could not dissuade her from it; it was in vain for them to point out to her how probable it was that he would be perfectly recovered before she got there; and how unnecessary is was for her to expose herself to the danger and fatigue of such a voyage, at that season. She would not be prevented, nor would she leave her child behind, as she could not be brought to part with it, lest the change of milk should hurt it, or it should not be taken proper care of in her absence. And as the old man had died, oppressed with anxiety, some time after his son William had disappeared, she had no object at home sufficient to detain her from her husband. She applied to captain Jenkins who agreed to give her a passage free in his ship from

Leith, and ſhe arrived ſafe at Gravesend, with her little child, where ſhe found her huſband almost quite well, and waiting an opportunity of coming to Scotland. It is impoſsible to delineate her joy, and his surprise at meeting each other. The satisfaction of so happy a circumstance, after so many hardſhips, was unequalled, and their mutual love glowed with renovated warmth.

To be continued.

NOTICES OF A FAMINE IN INDIA, WITH REMARKS SUGGESTED BY THAT EVENT.

FROM the correspondence of Dr Anderson of Madras, from time to time inserted in the Bee, it appears that one of the great objects of those truly patriotic exertions he has made for the improvement of India, is to guard against those famines which have hitherto been so frequent in populous tropical regions. We who live in a climate that does not admit of such abundant vegetation in favourable seasons, have no idea of the immense difference between the quantity of human food produced there in one season, in proportion to the deficiency of another, and the consequent mischiefs it occasions. But Dr Anderson having lived longer there than most Europeans, has so often had occasion to observe the fatal effects of these viciſsitudes, that it has excited in his mind an ardent desire of guarding against the effects of it in future, by the wise and salutary measures he has recommended. That our readers may form some judgement of the effects of this miserable scourge of mankind, I here subjoin an extract of a letter, of date the 5th of October 1792, describing the misery experienced by the inhabitants of a considerable part of India at present, which I received from a correspondent on the spot, by the Ganges. Since the commencement of this work, I have scarcely received

a dispatch from India in which something of the same sort has not been detailed.

"I do not recollect whether I mentioned before, that a most dreadful famine has raged for many months in our northern circars, from the failure of the usual falls of rain. For these nine or ten months past, the misery has been dreadful; the country in many places quite depopulated. Houses have been broken open where the whole family have been found dead: in other places, nineteen families out of twenty have been destroyed; and throughout these extensive circars, at the most moderate calculation, I understand more than one half have periſhed. An unfortunate dread of famine in Bengal, has caused the desolation to be so widely extended, and the supplies that have been sent have arrived so lately, that little good can yet be done; and the high price that imported grain always bears, does not allow the lower claſses of inhabitants in a country, where much silver does not circulate among them, ever to benefit much by it; the little money they could have had, must have been expended long ago, and it has been impoſsible to earn any thing for many months, from the great debility that a scanty, poor, and frequently unwholesome food has produced among the few remaining; yet I do not learn that any pecuniary aid has been afforded at present, to preserve even them; although it must be every where allowed, that no misfortune or loſs can happen to any country equal to the loſs of inhabitants. Such is the unfortunate situation of most Eastern countries, where no provision is made against a failure of rain, and where the inhabitants are satisfied with a daily subsistence."

To guard against the frequency of disasters of this sort, Dr Anderson has proposed to introduce the culture of silk, and cochineal, and indigo, into these regions; thus to furniſh employment to the people, and to give them the means of purchasing rice from other countries, when an

accidental scarcity in one province, ſhall happen to prevail; and along with that, he is now anxiously employed in recommending extensive plantations of the bread fruit trees, which may yield an abundant resource in those seasons when the crop of rice fails. The nopal plants, too, by affording a nouriſhing vegetable food, may contribute much, he thinks, in promoting this desirable end: but before his beneficent views can be fully effected, other measures must co-operate, which it is to be feared the state of India at present, scarcely admits of being vigorously adopted.

It is a prodigious misfortune to the people in India, that the religious tenets of many of their sects circumscribe the kinds of food they are permitted to eat within such narrow bounds. Not only are they debarred from tasting of animal food, but even many kinds of vegetable substances are held to be impure. Hence it happens, that the bulk of the people are reduced to live almost entirely upon rice. Now, as rice cannot be reared to a full crop, unleſs where the plants grow among water, for the greatest part of the time they are in the ground, it follows that when the rains are not so abundant as to supply the quantity of water neceſsary for that purpose, they have no crop of it; and on these occasions they have scarce any thing else, to which they can have recourse.

What adds to this misfortune, is, that on these occasions also, the only other substitute for rice the poor people have it in their power to adopt, must be also proportionally diminiſhed in quantity; *viz* the root of the nymphea aquatica, or water lily, which in rainy seasons affords them a plentiful food at a small expence. This is an aquatic plant, which requires much more water to bring it to perfection than rice does. The rice requires only to be kept in earth soaked with water, till it be in the state of pap. The nymphea grows best when covered

with water to a considerable depth. To obtain a gradual supply of water for the rice fields, it becomes neceſsary to form, in the uneven parts of the country, very extensive ponds, which they call *tanks*, having sluices at the under part, by which the water can be let off in regulated quantities, to supply the rice fields in the proper season. These tanks are often formed by raising a mound acroſs the lower opening of an extensive valley, and thus to form a large and capacious bason, or artificial lake, sometimes of many miles extent. During the rainy season the sluices are ſhut, and the water accumulated to a greater or smaller height, in proportion to the abundance or deficiency of the rains. Thus it happens that a great proportion of the soil in these districts is converted into tanks, or temporary lakes, on which no rice can be reared. The natives, however, having discovered that the nymphea aquatica grows as well under water, as the rice does above ground, and affords large roots, which yield a nouriſhing food, they plant the bottom of the tanks with these, which, when the flooding has been abundant, yield also an abundant crop; but when it is deficient, the produce of this article also fails in proportion. Thus are they deprived at the same time of this crop, and of the crop of rice, the only two kinds of food that are almost ever eaten by the natives.

Dr Anderson thinks that as the nopal thrives in the driest soil, and prospers luxuriantly in the warmest weather, if that plant were universally cultivated for the rearing of cochineal, in ordinary seasons, it might be applied as a temporary resource for augmenting the quantity of human food, when the two usual crops fail. The same reasoning applies to the bread fruit tree, which, by rooting deeper in the ground than the ordinary tribe of annual plants, can find nouriſhment in firmer soils, and during a longer course of dry weather than they could bear. Could these trees, therefore, be eſtabliſhed in abundance in every district of the country, they would come to afford

a good crop when the others failed; and were the inhabitants to be brought to live equally upon this fruit and rice, it could scarcely ever happen, that a total failure of both crops would take place at the same time; so as to reduce the people to that extremity of distress to which they are so frequently exposed at present.

There are two things, however, still wanted to enable the people to free themselves from every danger of suffering by famine. One is, the practice of feeding some domesticated animals on such fruits and roots as can be there easily reared, that are not reckoned such palatable food by man as rice, and the other food they have been used to; such as that kind of bread fruit that they do not think delicate, but which could be employed in cases of necessity; for unless they can employ a thing of this sort with profit *in ordinary* seasons, it is not to be supposed they will ever rear it in such quantity as to prove a great resource in times of scarcity. But if they were in the practice of feeding animals with it, and of eating their flesh; the animals themselves, being first killed, would afford one supply; and the food they would have consumed would afford another supply, which would be highly beneficial. The same reasoning might apply to the feeding of poultry, and other animals, in ordinary years, upon rice. But the prejudices of their religion prove an unsurmountable bar to this salutary practice.

The other circumstance which would tend still more to remove the dread of famines, would be to afford the inhabitants a full protection to their persons and property, and to grant them a similar freedom to trade, as that which is enjoyed by all ranks of people in Britain. Were this the case, there can be no doubt that, in a few years, the certain prospect of gain would induce the rich people to store up such quantities of rice, during plentiful years, as would always supply the call for it in times of scarcity,

wherever it might happen. But this is a measure, which, I am afraid, we may rather *wish*, than *hope* to see adopted in our day.

Slight Notices of the present Seat of War in the Netherlands.

Continued from p. 36.

Namur, Liege, Maestricht, Roermonde, and Venloo, are all upon the banks of the river Maese. Maestricht is the largest of these places, and is one of the most ancient and remarkable cities in the Netherlands, particularly for its strength. It lies fourteen miles north of Liege; it is divided by the Maese into two parts, which are joined to each other by a grand stone bridge. The smallest, situated on the side of the duchy of Limburg, is called *Wyk*. It is one of the strongest fortreſses belonging to the Republic, and likewise one of the principal keys on the Maese. The *Jeker*, a small river, running through the south side of the town, and falling into the Maese at the bridge, may be checked in its course by means of sluices, and the level country between the town and St Petersberge, (a strong fort about two gunſhots to the south of it,) flooded by it. The houses within its walls are about 3000 in number.

Liege is a populous city, about twenty-eight miles lower down the river than Namur. It is a place of no strength; it is about four miles in circuit. Two branches of the Maese, with other rivulets or canals run through many of the streets, forming so many islands, and render it a very pleasant place. The differences that have for some time past prevailed between the prince biſhop and his people, are well known to all our readers.

Roermonde, commonly called *Ruremonde*, lies on the confluence of the Roer and the Maese, about twenty

miles south of Venloo. It is a populous place, but of no great strength. Here the French had collected their principal magazines for forwarding their operations on the *Maese*.

Venloo is a place of considerable strength, though of no great beauty, on the lower Maese, in the province of Geldre. It consists of only eight or nine hundred houses; most of the inhabitants are boatmen, carriers, porters, *&c.* Opposite to the town, lies an island in the Maese, called the *Waard*, with a strong bastion on it, for the defence of the town on that side; and fronting the island, on the other side of the Maese, stands fort St Michel, situated about two musket shots from the town. It lies about ten miles S. W. from Geldres, and near forty N. E. from *Bois le duc*.

Bois le duc is situated at the confluence of the rivers *Bommel* and *Aa*, which after their junction here are called the *Diest*. At about four miles from hence, this river loses itself in the Maese, at a place called fort *Crevecœur*, from which, however, it may be diverted by means of a sluice, and the whole circumjacent country laid under water. The town is pretty large, and intersected with a great many canals. It was once a place of great strength, owing chiefly to an extensive morass about it, which being now in a great measure drained, renders it much less formidable than formerly. It is about twenty-five miles east, and a little north of Breda, and ten miles from fort Hewsden.

The French minister at war says, he has sent orders to Dumourier, to lay immediate seige to Maestricht. The distance he will have to march from Williamstadt, before he can reach Maestricht, is very near 100 miles, so that even if no enemy should oppose him, it cannot be invested in a very short time.

**** It is hoped the map of the seat of the war will be ready next week. Two letters from G. L. are received, both charged postage. No address of the kind be used, unless for newspapers alone, can pass free.*